Claims

What is claimed is:

1. A method of encoding XML content, comprising the steps of:

generating content nodes for transmitting content information; and

generating at least one structure node for identifying said content nodes and for indicating where said content nodes are positioned within a larger XML document tree.

2. The method of claim 1, wherein said content nodes and said structure nodes are generated in accordance with a specified document template.

3. The method of claim 1, wherein said structure node includes a list of said content nodes.

4. The method of claim 1, wherein said XML content is generated in real-time by a user operating a textual input device.

5. The method of claim 1, wherein said XML content is generated in real-time by a speech recognition system.

6. A method of encoding an XML document, said XML document comprised of a plurality of nodes, said method comprising the steps of:

decomposing said XML document into a plurality of sub-trees, each of said sub-trees including at least one node; and

independently transmitting each of said sub-trees with information indicating how said sub-tree is positioned within said larger XML document.

7. The method of claim 6, wherein said decomposing step is performed in accordance with a specified document template.

8. The method of claim 6, wherein said information indicating how said sub-tree is positioned within said larger XML document is transmitted in a structure node.

9. The method of claim 6, wherein said XML document is generated in real-time by a user operating a textual input device.

10. The method of claim 6, wherein said XML document is generated in real-time by a speech recognition system.

11. A method for transmitting an XML document as a continuous stream, comprising the steps of:

decomposing said XML document into a plurality of sub-trees;

generating content nodes for transmitting content information included in said XML document; and

generating at least one structure node for each of said sub-trees, said structure nodes identifying content nodes included in said corresponding sub-tree and indicating where said sub-tree is positioned within said larger XML document.

12. The method of claim 11, wherein said decomposing step is performed in accordance with a specified document template.

13. The method of claim 11, wherein said structure node includes a list of said content nodes.

14. The method of claim 11, wherein said XML content is generated in real-time by a user operating a textual input device.

15. The method of claim 11, wherein said XML content is generated in real-time by a speech recognition system.

16. A method for receiving a streamed XML document, said XML document including content nodes and structure nodes, said method comprising the steps of:

determining if each received node is a content node or a structure node;

processing said content nodes directly; and

recompiling said XML document from said content nodes using information contained in said structure node.

17. The method of claim 16, wherein said processing step further comprises the step of displaying said content.

18. The method of claim 16, wherein said processing step further comprises the step of storing said content.

19. The method of claim 16, further comprising the step of continuing to process subsequent nodes even if one of said nodes is not properly received.

20. A method of decoding a received XML document, said XML document comprised of a plurality of nodes, said method comprising the steps of:

receiving a plurality of XML sub-trees, each of said sub-trees including at least one node and indicating how said sub-tree is positioned within said larger XML document; and

positioning each of said sub-trees in a larger XML document using said received position indication.

21. The method of claim 20, wherein said processing step further comprises the step of displaying said content.

22. The method of claim 20, wherein said processing step further comprises the step of storing said content.

23. An XML transmitter comprising:

a memory for storing XML content and computer readable code; and

a processor operatively coupled to said memory, said processor configured to:

generate content nodes for transmitting content information; and

generate at least one structure node for identifying said content nodes and for indicating where said content nodes are positioned within a larger XML document tree.

24. An XML transmitter comprising:

a memory for storing XML content and computer readable code; and

a processor operatively coupled to said memory, said processor configured to:

decompose said XML document into a plurality of sub-trees, each of said sub-trees including at least one node; and

independently transmit each of said sub-trees with information indicating how said sub-tree is positioned within said larger XML document.

25. An XML transmitter comprising:

a memory for storing XML content and computer readable code; and

a processor operatively coupled to said memory, said processor configured to:

decompose said XML document into a plurality of sub-trees;

generate content nodes for transmitting content information included in said XML document; and

generate at least one structure node for each of said sub-trees, said structure nodes identifying content nodes included in said corresponding sub-tree and indicating where said sub-tree is positioned within said larger XML document.

26. An XML receiver for receiving a streamed XML document, said XML document including content nodes and structure nodes, comprising:

a memory for storing computer readable code; and

a processor operatively coupled to said memory, said processor configured to:

determine if each received node is a content node or a structure node;

process said content nodes directly; and

recompile said XML document from said content nodes using information contained in said structure node.

27. An XML receiver for receiving a streamed XML document, said XML document including content nodes and structure nodes, comprising:

a memory for storing computer readable code; and

a processor operatively coupled to said memory, said processor configured to:

receive a plurality of XML sub-trees, each of said sub-trees including at least one node and indicating how said sub-tree is positioned within said larger XML document; and

position each of said sub-trees in a larger XML document using said received position indication.